#### **CHAPTER FOUR**

#### SERVICE AREAS

This chapter establishes service areas for each of the study airports. It is important to determine the catchment area from which each airport draws its passengers in order to determine total air travel volumes that are associated with each market. In this Chapter, the 13 (ten existing and three potential) study airports are considered to determine both a "theoretical" and an "actual" service area for each airport. "Theoretical" service areas are based upon a one hour driving distance to the study airports. The "actual" service area describes the geographic area from which the 10 airports with existing commercial scheduled service are in reality, drawing their passengers. Generally, driving time is the parameter that is most frequently used to establish airport service areas. After determining the theoretical and the actual service areas, the two are compared to find discrepancies; possible reasons for these discrepancies are also determined. This service area analysis forms the preliminary basis for identifying those cities/market areas that should logically be considered as candidates for improved or additional service. This information, combined with the market potential information in Chapter 5, will be used to determine "unconstrained" demand for commercial airline travel that is associated with each market area.

### 1. THEORETICAL SERVICE AREAS

Accessibility to the State's commercial service aviation facilities was examined as part of the Arizona Air Service Study. The geographic coverage of the State's airport system, to some extent, determines how well Arizona travelers are served by the State's system of commercial airports. Geographic coverage was identified using the airport system's service areas. Service areas are defined primarily by each community's accessibility to an airport. Travel time, or the amount of time it takes a prospective air traveler to reach an airport, is a standard measure of accessibility and was used in this analysis to define the State's theoretical airport service areas.

General planning studies and National Plan of Integrated Airport Systems (NPIAS) criteria have shown that, on the average, commercial air service passengers are willing to travel 120-minutes to an air carrier airport with major/national service and 60-minutes to an airport with regional/commuter service. These travel patterns are exemplified in the State of Arizona where passengers travel greater distances and endure longer driving times to reach the airports in Phoenix and Tucson, when compared to the smaller regional airports. As a result, the airports serving Tucson and Phoenix have larger theoretical service areas than the study airports. Driving time relationships were applied to the Arizona roadway system to identify areas in the State that are within the theoretical service area of airports with scheduled commercial air service. It is important to note that actual driving times can vary widely, based on factors such as geography, time of day, weather conditions, highway conditions, and other factors.

For this study, service areas were examined for the following airport categories:

- Major/national commercial service airports
- Regional/commuter commercial service airports
- Potential commercial service airports
- Statewide commercial service coverage

These service areas are discussed in the following sections.

# A. Major/National Commercial Service Airports

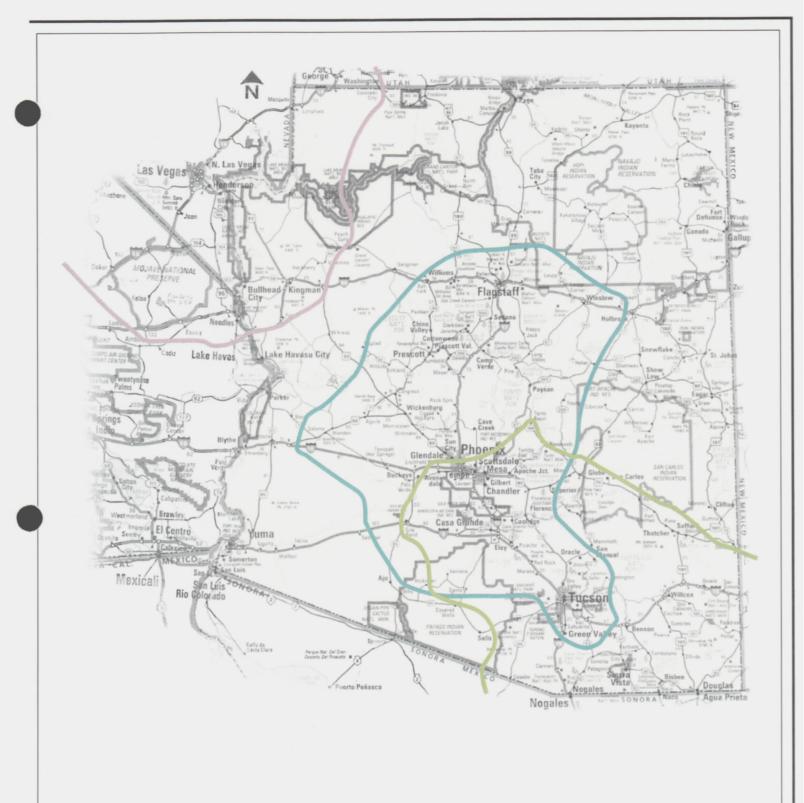
Analysis of major/national commercial air service coverage within Arizona was based on data from NPIAS planning criteria.¹ Two Arizona airports are currently served by major/national air carriers: Phoenix Sky Harbor and Tucson International. In addition to these airports, the Las Vegas McCarran Airport in Nevada has been included in this analysis as a result of its relative proximity to some communities in Arizona. Further, this study's survey efforts show that some Arizona air travelers routinely drive to this airport for their departures. The NPIAS indicates that a 120-minute driving time represents a theoretical service area for major/national commercial service airports. **Exhibit 4-1** displays the theoretical service areas for the three major/national commercial service airports that play a role in serving Arizona's commercial air service needs. Those areas that fall within the outlined areas are considered to be within a typical driving distance (120 minutes), as defined by the FAA, of a major/national airport.

As shown geographically, much of the state of Arizona lies within the theoretical service area of either Phoenix Sky Harbor, Tucson International, or Las Vegas McCarran. It is important to note that service by major/national carriers is focused in the major metropolitan areas. This same trend is occurring nationwide and is indicative of the deregulated marketplace, wherein the scheduled air carriers provide service to the most profitable markets. For the larger major/national carriers, there is more profit potential in markets with higher population densities

# B. Regional/Commuter Commercial Service Airports

Regional/commuter air service coverage was determined using the same approach, but a 60-minute driving time was used (see **Exhibit 4-2**). The existing regional/commuter airports in the State include: Laughlin/Bullhead International, Flagstaff-Pulliam, Grand Canyon

<sup>&</sup>lt;sup>1</sup>Major air carriers are airlines with gross operating revenues of more than\$1 billion during any calendar year; national carriers are those that gross between \$75 million and \$1 billion; and regional airlines gross under \$75 million. Commuter airlines are classified according to the type of aircraft used (under 60 seats) and their operating frequency (at least five scheduled round trips per week between two points).

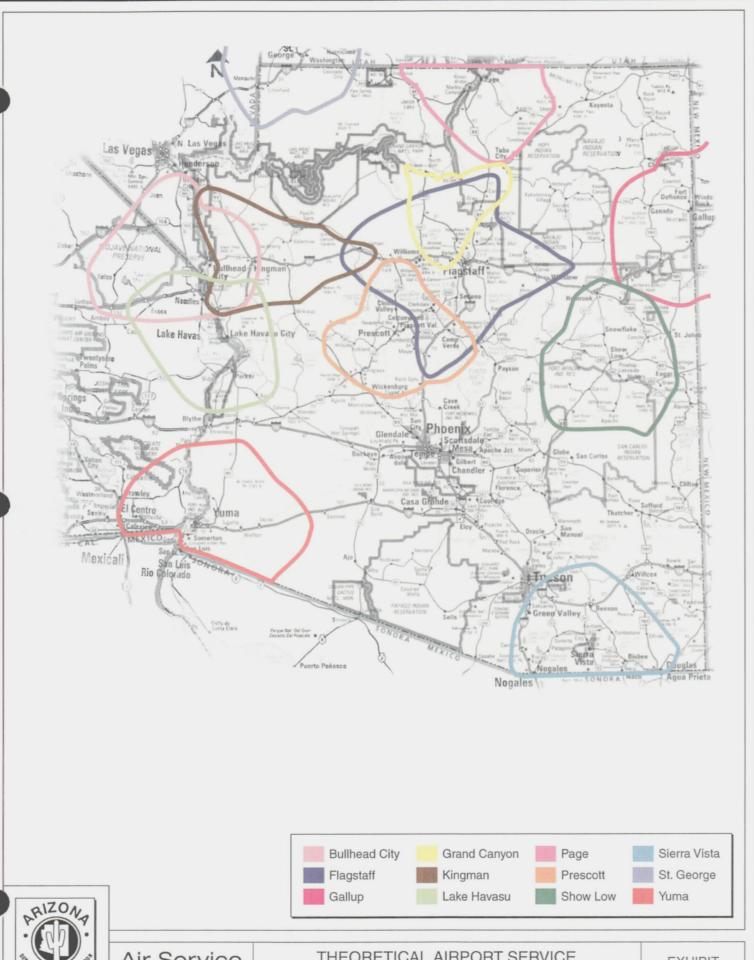




THEORETICAL MAJOR/NATIONAL AIRPORT SERVICE AREAS

EXHIBIT 4-1

Las Vegas (120 mile) Phoenix (120 mile) Tucson (120 mile)





National Park, Kingman, Lake Havasu City Municipal, Page Municipal, Prescott Ernest E. Love Field, Show Low Municipal, Sierra Vista Municipal, and Yuma International. In addition, the St.George Municipal Airport in Utah and the Gallup International Airport in New Mexico have been included in this analysis due to their relative proximity to Arizona. These out-of-state airports are, in some instances, closer to some Arizona communities than regional/commuter airports within the State.

As shown, geographically, approximately one-half of the State lies within the theoretical service areas of Arizona and other nearby airports with regional/commuter air service. The service areas for the regional/commuter airports are focused mainly across the north-central part of the State, but coverage is also provided in western Arizona along the California-Arizona border, in northwest Arizona along the Utah-Arizona border, in southeast Arizona along the Mexico-Arizona border, and in northeast Arizona along the New Mexico-Arizona border.

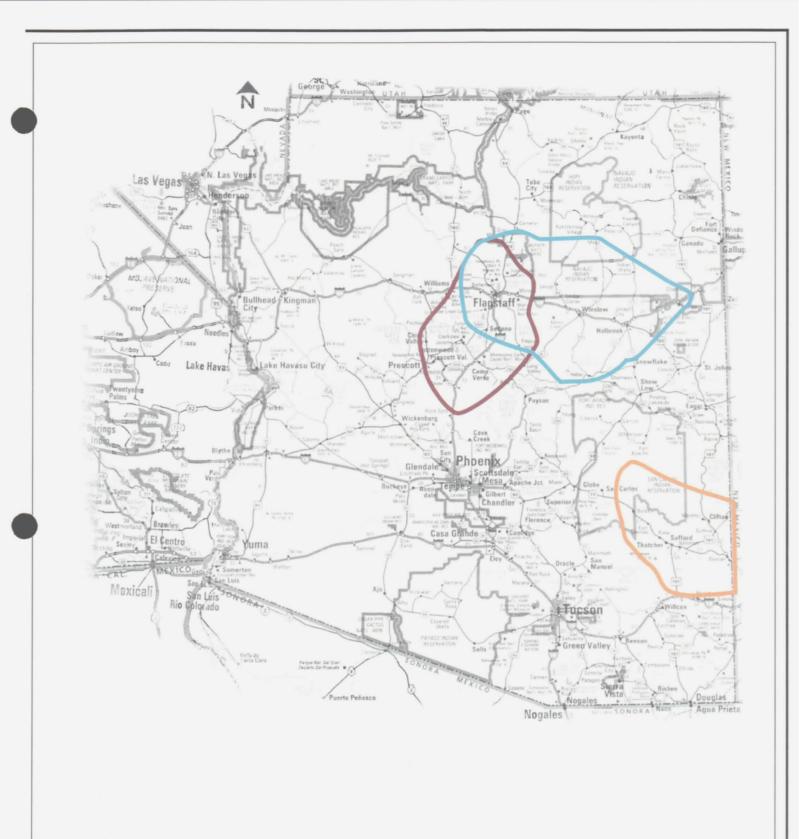
The 60-minute driving radius for each airport occasionally encompasses areas outside the State. The Yuma service area extends into California and includes the cities of El Centro and Blythe. The Lake Havasu City and Bullhead City theoretical service areas extend and overlap into California to include the City of Needles. The Page theoretical service area extends into Utah and includes Lake Powell; Lake Powell is located directly on the border of both Arizona and Utah. Nogales, Mexico is located on the border of Mexico and Arizona and extends into the Tucson and Sierra Vista theoretical service areas. According to survey results, some travelers from Nogales drive to Sierra Vista to obtain commercial air service.

# C. Potential Commercial Service Airports

Three Arizona cities currently without scheduled commercial air service were examined to determine their ability to support varying levels of scheduled commercial air service. These three potential markets were selected for review based on the interest of the individual communities to be involved in the study. It is important to note that all three of these airports have had scheduled air service in the past. The three potential commercial service airports are:

- Safford Municipal
- Sedona
- Winslow-Lindbergh Regional

To analyze the additional coverage that these potential commercial service airports would provide and to determine how service at these airports could improve Arizona's accessibility to commercial air service, 60-minute driving times were developed for each of these three potential commercial service markets. **Exhibit 4-3** depicts the coverage that would be provided with these three additional 60-minute commercial service airport service areas.





THEORETICAL AIRPORT SERVICE AREAS (POTENTIAL)

**EXHIBIT** \*60 minute 4-3

Safford Sedona Winslow As shown in Exhibit 4-3, if service were established, overlaps would exist between Sedona and Winslow's theoretical service areas. The Safford service area would extend into New Mexico, but would not encompass Silver City, which is located 80 miles east of Safford. Silver City presently has commercial air service. Residents of Safford, particularly Phelp's Dodge employees, frequently drive to Silver City to obtain available commercial air service. If service were provided at these three potential commercial service airports, a limited amount of additional geographic coverage would be gained. Subsequent sections of this report will determine if there is sufficient commercial air travel demand in these potential markets to support commercial air service. The impact of service to these potential service points on communities that now have service will be important to determine the State's ability to support service to the three potential service points.

## D. Statewide Commercial Service Coverage

The service areas for existing major/national and regional/commuter airports and the potential commercial service airports overlap extensively. Exhibit 4-4 shows the service areas for all three categories of commercial service airports; the coverage provided by the potential commercial service airports is differentiated on the exhibit since service is not currently provided to these airports. Overall, the majority of Arizona's population resides within a reasonable driving time of an existing Arizona commercial air service or one of the potential commercial air service airports. The only substantial area not falling within a noted service area includes the northeastern corner of the State, which has relatively low population density due to the Navajo Indian Reservation and its rugged terrain.

Commercial service coverage is also provided to the State of Arizona by airports in Nevada, Utah, and New Mexico. Airports outside the State that provide coverage include:

- Las Vegas (NV) major/national
- St. George (UT) regional/commuter
- Gallup (NM) regional/commuter

These three airports provide additional geographic coverage/access for several Arizona communities. The St. George airport's theoretical service area extends into Arizona's northwest corner. Although most of this area is rural, St. George's theoretical service area does include the small communities of Mesquite, Littlefield, Wolf Hole, and Colorado City, which do not fall within the service area of any of the study airports. The Gallup airport's market area also encompasses Arizona communities that do not fall within the service area of Arizona's existing or potential commercial service areas. The Arizona communities of Sawmill, Fort Defiance, Window Rock, Ganado, St. Michaels, and Lupton are within Gallup airport's service area.







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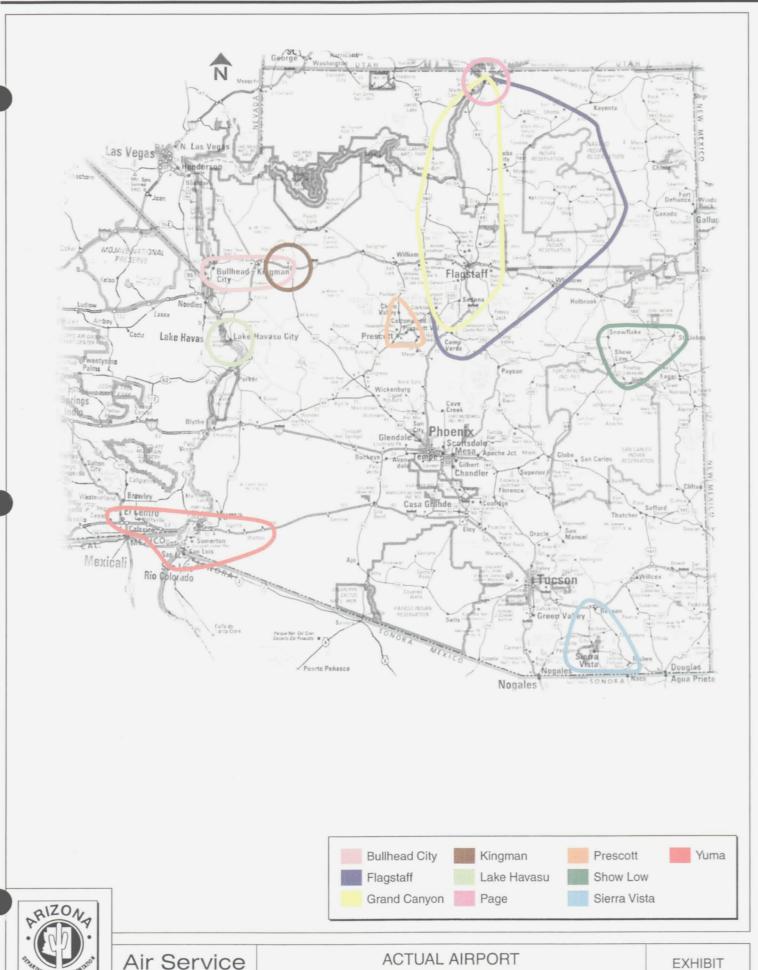


In addition to out-of-state regional/commuter airports, Las Vegas has a theoretical service area that expands into a large portion of the northwest corner of Arizona. The Las Vegas theoretical service area encompasses all of the Bullhead City service area and largely overlaps with the Kingman and Lake Havasu City theoretical service area. For any of the communities which have only regional/commuter service, there will always be people that travel further distances to reach an airport with major/national carriers. The Las Vegas service area also stretches into parts of Arizona that do not fall with in the theoretical service area of any Arizona airports, although the Las Vegas service area overlaps in part with the St. George service area. The Arizona communities that do not fall in any other theoretical service area, other than the Las Vegas service area, include: Willow Beach, Bonelli Landing, Temple Bar, Meadview, and Pearce Ferry.

The three potential service airports in Arizona including Safford, Winslow, and Sedona, are being reviewed to determine if commercial service at these three airport is feasible. The first step in this process involves looking at the theoretical service area for these three airports, to determine how much of each of their theoretical service areas overlaps with airports supporting existing commercial passenger service. More than half of Safford's theoretical service area is overlapped by that of Tucson. Safford's service area does, however, include a few small communities that do not fall within an existing service area. These communities include: Morenci, Plantsite, Clifton, Guthrie, Duncan, and Franklin. Winslow's theoretical service area is also largely overlapped by the service areas of Show Low, Gallup, and Flagstaff. However, there are a few communities that fall within Winslow's theoretical service area that are not within an existing theoretical service area. These communities are: Indian Wells, Dilkon, and Navajo. The Sedona theoretical service area is completely overlapped with other existing service areas. Sedona's theoretical service area almost completely overlaps with that of Flagstaff, and it is completely encompassed by the Phoenix service area. Other existing service areas that also overlap with Sedona include Grand Canyon and Prescott.

## 1. ACTUAL MARKET SERVICE AREAS

Actual service areas were identified to determine which airports air travelers are currently using to initiate their commercial airline air travel. From the actual service areas, it is possible to determine the driving patterns of Arizona air travelers. The identification of actual service areas facilitates a comparison of how far travelers in Arizona are actually driving to obtain commercial air service. This comparison also helps to determine if air travelers from one community are routinely driving to more distant airports rather than using the one in their local community. Actual service areas were determined for the 10 study airports that currently have scheduled passenger service; these include: Bullhead City, Flagstaff, Grand Canyon, Kingman, Lake Havasu City, Page, Prescott, Show Low, Sierra Vista, and Yuma. The actual service areas were identified from information obtained from travel agent surveys, travel agent ticket logs, and passenger surveys. Exhibit 4-5 displays the actual service areas for the 10 communities with existing commercial air service.



SERVICE AREAS

4-5

# A. Bullhead City

Laughlin-Bullhead City Municipal Airport's actual service area primarily spans eastward to include the cities of both Bullhead City and Kingman. In addition to travelers from Arizona markets, this airport also accommodates travelers to and from Laughlin, NV which is just across the border from Bullhead City. The airport provides access for visitors who are attracted to the area by its various gaming establishments. Much of this community's existing airline service is now provided by charter carriers who operate solely to serve the gaming establishments located in the area. Air service provided by these charter operators influences this market's annual level of enplaned passengers. While local and non-local travelers who desire access to this part of the State often fly on the charter carriers who now provide service, the bulk of the enplanements carried by the charter operators are visitors who are attracted to the area by the presence of its gambling establishments. Without these establishments, the market's demand for commercial airline service would be significantly lower.

When compared with the theoretical service area, the actual service area for this airport is much smaller. The airport does not attract travelers from Nevada and California markets that are included in its theoretical service area. Due to the proximity of Nevada and California cities to Las Vegas, it is likely that travelers from these service areas are driving directly to Las Vegas to reach major/national service, as opposed to driving to Bullhead City for regional/commuter service.

On the periphery of Bullhead City's theoretical service area are the communities of Dolan Springs, Chloride, and Yucca, and Topock. Data indicated that travelers associated with these market are not using the Bullhead City airport, nor any other regional/commuter airport. Therefore, it is also assumed that these travelers are driving to more distant major/national airports. Bullhead City is relatively close to Las Vegas and is connected by a two lane highway. This leads to a substantial amount of passenger leakage from Bullhead City to Las Vegas. Although Las Vegas has a high number of flight frequencies to a number of non-stop markets, it is technically not a connecting hub, and it does not always provide direct access to the national air transportation network. Therefore, due to the America West connecting hub in Phoenix, there are still air travelers who will drive to Phoenix from Bullhead City and its surrounding areas for access to the air service provided at Phoenix.

## B. Flagstaff

Of the regional/commuter airports in Arizona, Flagstaff-Pulliam Airport has the largest actual service area. Flagstaff-Pulliam has the highest level of commercial air service of the regional/commuter airports in northern Arizona. Flagstaff also pulls passengers from the Grand Canyon area, because Flagstaff has service to Phoenix while the Grand Canyon only has service to Las Vegas. The actual service area spans north into Utah, attracting a small

percentage of travelers from Page and the resort area around Lake Powell. To the northeast, the airport serves as a gateway to the national air transportation system for communities which include: Shonto, Kearns Canyon, and Hoteville. Flagstaff-Pulliam Airport also serves markets from as far south as Camp Verde. The Flagstaff-Pulliam Airport's service area completely overlaps with the Page and Grand Canyon service areas, indicating passenger leakage from both Page and the Grand Canyon.

Compared to Flagstaff's theoretical service area, the actual service area is larger than the theoretical, atypical for smaller regional/commuter airports. However, the actual service area takes a much different shape than the theoretical. Flagstaff's theoretical service area spans farther to the south than the actual. This is primarily due to the leakage of passengers to Phoenix. For residents and visitors of communities closer to Phoenix, it is more logical to drive an hour south to Phoenix as apposed to driving an hour north to Flagstaff where they get on a plane and fly to Phoenix. Surprisingly, the actual service area does reach as far south as Camp Verde. Reasons for travelers from Camp Verde to use Flagstaff-Pulliam could include factors such as avoiding the hassle of driving to a large city. Also, long term parking at the Flagstaff-Pulliam is free which could be a factor for some travelers. Even with regional/commuter service at the Flagstaff-Pulliam Airport, the local market is still losing a number of travelers to Phoenix. Air travelers are willing to drive two hours on a major interstate to reach a major/national airport hub with excellent service and lower fares. Although Flagstaff's actual service area spans much further to the northeast than its theoretical service area, the theoretical service area spans further to the west than the actual service area. To the west, Flagstaff's theoretical service area includes the communities of Seligman, Ash Fork, Drake, Paulden, and Chino Valleys; however, data does not indicate that travelers associated with these communities are actually using Flagstaff-Pulliam.

### C. Grand Canyon

The actual service area for the Grand Canyon National Park Airport spans as far north as Page and as far south as Sedona and Cottonwood. Two factors contribute to the size of this service area. Of the 10 study airports, this is the only airport that has service to Las Vegas. Also, the frequency of flights at the Grand Canyon Airport has appeal for some air travelers, despite the fact that this service is provided by charter carriers as opposed to regularly scheduled regional/commuter carriers. The actual service area spans further north and south than the theoretical service area. The Grand Canyon service area is completely overlapped by that of Flagstaff which shows that all of the markets that the Grand Canyon is serving are also being served by the Flagstaff-Pulliam Airport. Although Flagstaff is serving a greater percentage of air travelers from these markets, the size of the Grand Canyon service area shows that some air travelers value service to Las Vegas, particularly because Grand Canyon is far less ground accessible to most markets than the airport in Flagstaff. The Grand Canyon National Park Airport is accessible only from Route 180 to the south without having to go through the Grand Canyon National Park. Unique to the Grand Canyon National Park

Airport is the fact that there are very few residents to support the airport. The airport exists primarily to serve visitors that are coming to visit the Grand Canyon National Park.

## D. Kingman

The Kingman Airport has an actual service area that spans primarily to the southwest. The airport serves the cities of both Kingman and Lake Havasu City. When this airport's actual service area is compared to its theoretical service area, the actual service area is much smaller. The theoretical service area spans much further to the east, including Truxton, Seligman, and Willow Beach to the north. These communities do not show up in the actual service areas for any of the regional/commuter airports. Therefore, it can be assumed that these communities are booking their air travel through the major/national airports. Las Vegas and Phoenix are the logical major/national airports that are typically being used by travelers to and from this area. Air travelers from the north portion of Kingman's theoretical service area are likely using Las Vegas, whereas travelers in the southern and eastern portion of Kingman's theoretical service area, including Seligman, are likely using Phoenix. Bullhead City and Kingman both fall within the theoretical and actual service area for Kingman. Travel agency and passenger surveys indicated that there are a number of passengers from this service area who are driving to and from distant markets such as Las Vegas, Phoenix, Los Angeles to begin their airline travel. Highway access from Kingman and the surrounding areas also has an impact on the likelihood of air travelers from this area using more distant airports. Ground access from Kingman to Las Vegas is a four lane divided highway, and it is a relatively easy drive. The drive from Kingman to Phoenix is about twice that of the drive to Las Vegas, and it is on a two lane highway. Therefore, a larger percentage of the air travelers associated with this market choose to drive to Las Vegas over Phoenix.

### E. Lake Havasu City

The passenger base of Lake Havasu City Airport, located near the western border of Arizona, is made up entirely of passengers from the Lake Havasu City area. This airport serves only the local community of Lake Havasu City. Lake Havasu City's theoretical service area actually encompasses several communities within both Arizona and California, spanning a much larger area than its actual service area. Surveys indicated that none of the surrounding communities that are in the theoretical service area are actually using Lake Havasu City for their air travel. This suggests that travelers from this market are driving to more distant major/national airports such as Las Vegas or Phoenix. Data indicates that travelers from Lake Havasu City are commonly driving to Las Vegas and Phoenix for major/national service. More travelers are driving to Las Vegas, as highway access from Lake Havasu City to Phoenix is not conducive and Las Vegas is closer.

### F. Page

Page is located on the northern border of Arizona and Utah. The Page Municipal Airport has an actual service area that encompasses Page and the immediately adjacent areas. Also, a small area in southern Utah utilizes the Page Airport; specifically, vacationers traveling to and from the resort area at Lake Powell. Other than this, the actual service area does not span much beyond the City of Page. Pages's theoretical service area does, however, span to several smaller communities in Arizona within a one hour driving radius; these include: Marble Canyon, Cedar Ridge, The Gap, Tuba City, Kaibito, and Jacobs Lake, however this area is much broader than the actual service area for this airport. From the travel agent and passenger surveys, it was found that the air travelers associated with these cities actually fall within the service area of competing airports. Marble Canyon, Cedar Ridge, and The Gap all fall within the actual service areas of the Grand Canyon and Flagstaff airports. Tuba City and Kaibito also fall within the Flagstaff service area, but outside the Grand Canyon service area. This illustrates that the actual service area for Page is much smaller than its theoretical service area. Data also indicates that air travelers associated with the local Page market are driving to the major/national airports in Las Vegas and Phoenix. Drives to these major/national airports are very long, taking four hours to drive from Page to Phoenix, although the highway access to Phoenix is relatively good.

#### G. Prescott

Prescott Municipal Airport was found to draw passengers from Prescott and nearby communities. Nearby communities include Prescott Valley and Chino Valley. As with most of the other study airport, the actual service area for Prescott is much smaller than its 60-minute theoretical service area. The theoretical service area includes several additional communities, many of which also overlap with Flagstaff's theoretical service area. Some of the communities in Prescott's theoretical service area do not fall within any of the actual service areas, while others fall within Flagstaff's actual service area. These are primarily communities such as Clarkdale, Jerome, Cherry, and Camp Verde that fell within the theoretical service areas of both Prescott and Flagstaff. Since Flagstaff has a higher level of service than Prescott, it is logical that travelers in those communities chose to fly from Flagstaff as apposed to Prescott. As mentioned for Flagstaff's service area, a number of air travelers from these communities are still choosing to use the Phoenix airport. None of the communities within Prescott's actual service area were found to be using other regional/commuter airports. However, data obtained from travel agent and passenger surveys indicate that the majority of air travelers associated with the Prescott market are driving to Phoenix for major/national service. Phoenix is an hour and a half drive from Prescott on Interstate 17. Many travelers associated with the Page market also choose to utilize van pools for access to Phoenix.

#### H. Show Low

Show Low's actual service area was found to draw passengers from several nearby communities. These communities include: Snowflake, Taylor, Concho, St. Johns, Vernon, and Pinetop-Lakeside, none of which pull the actual service area westward. All of these communities are also included in the theoretical service area, however, the theoretical service area encompasses a much larger geographic area. This is typical of most of the Arizona airports included in this study. The theoretical service area spans much further to the north and west. None of the cities included in the theoretical area are using other regional/commuter airports, although data collected in the travel agent and passengers surveys indicate that air travelers from Show Low and its nearby communities are utilizing the Phoenix airport on a regular basis. Phoenix, however, is a difficult drive which is approximately four hours in length. Communities within the theoretical service area that are not in the actual service area do not fall within any other regional/commuter airport's service area, which indicates that travelers from neighboring communities are most likely driving to major/national airports.

## I. Sierra Vista

Sierra Vista Municipal Airport's actual service area centers around Sierra Vista and includes several small surrounding communities. The service area encompasses Benson to the north and Bisbee to the east. Other small communities that fall within the Sierra Vista service area include: Hereford, Tombstone, Huachuca City, Elgin, Fairbank, and St. David. The service area spans south to the border of Mexico. Typical of most of the airports in this study, Sierra Vista's theoretical service area is considerably larger than its actual service area, particularly to the north and west. This is primarily due to the highway access provided to cities west of Sierra Vista, such as Nogales. Nogales has no direct route to Sierra Vista, however, it does have convenient access to Tucson on Interstate 19. Because of Sierra Vista's relative proximity to Tucson (approximately an hour and a half drive), it does experience passenger leakage. One factor that helps draw people to the Sierra Vista airport, however, is the connecting hub service at Phoenix. Although Tucson is a major/national airport, it does not have the extensive level of service seen in Phoenix.

#### J. Yuma

Yuma International Airport's actual service area spans primarily to the east and west of Yuma. The Yuma service area takes this shape due to Interstate 8 which provides quick access to Yuma, and because of population distribution in proximity to the airport. The airport serves several communities in Arizona, as well as nearby communities in California and Mexico. Communities that fall within Yuma's actual service area include: Yuma, Bard, Wellton, Somerton, San Luis, Mexicali, Calexico, and El Centro. Yuma's actual service area is similar in size to its 60-minute theoretical service area, although it is only slightly smaller.

Although Yuma is capturing most of its theoretical service area and not losing it to competing regional/commuter airports, air travelers from Yuma and neighboring communities are still driving to more distant major/national airports. Travel agent and passenger survey data indicate that air travelers are regularly driving to Phoenix for air service. Reaching Phoenix from Yuma is relatively easy, traveling east on Interstate 8 to Interstate 10, however, this is a time consuming drive and undesirable particularly for business travelers. Some of the passengers associated with Yuma are also known to be driving to San Diego for commercial passenger service.

# 3. CONCLUSIONS

The previous exhibits in this chapter depict the "theoretical" and "actual" service areas of the 13 study airports (10 existing and 3 potential airports). It should be noted that many anomalies arise when comparing the two. With the exception of Flagstaff and Grand Canyon, all of the remaining study airports have an "actual" service area much smaller than their "theoretical" service area. This signifies that travelers are not necessarily using the airport within closest proximity to them. Travel agency surveys and travel agent ticket logs indicate that air travelers throughout the State of Arizona are driving to Phoenix, Tucson, and Las Vegas for major/national air service. The airports in Phoenix, Tucson, and Las Vegas capture a large majority of Arizona's commercial air travelers who theoretically should be utilizing the regional/commuter airports located in closer proximity to their travel originations and destinations. In actuality, the major/national commercial service airports, especially Phoenix, are drawing travelers from greater distances than the theoretical two hour driving radius that was used in this analysis. Town meetings held as part of this study revealed that Arizona residents are willing to drive up to four hours or more to Phoenix for commercial air service.

The Phoenix airport not only captures a large portion of the air travelers associated with Arizona's regional/commuter airport market areas, but also draws passengers from the Tucson market. Many Tucson residents reportedly drive approximately two hours to Phoenix for commercial air service. Factors that may influence the travelers' decision to utilize air service in Phoenix include airline schedules which offer high departure frequencies and conveniently-timed flights, nonstop service, aircraft size, fares, and/or airline loyalty. Bus transportation service is an additional factor that impacts market capture rates. Regularly scheduled buses and vans transport travelers from outlying communities to Phoenix at a relatively inexpensive rate. In many of the study airport market areas, this study found that ground transportation service is advertised better than the commercial air service available at the local airport.

As indicated in this chapter, almost every study airport has an actual service area smaller than its corresponding theoretical service area. This indicates that scheduled commercial airline service and fares available at the study airports, when compared to service and fares at other larger airports, are not sufficient to allow most study airports to attract demand from a sixty minute radius. In the deregulated airline operating environment, this is fairly commonplace, as smaller communities have witnessed declining levels of commercial air service and higher fares that have combined to divert

air travelers to larger, competing airports. While each of the communities in Arizona has an inherent level of demand for commercial airline service that is associated with factors such as population, income, tourism, and employment, in the deregulated airline operating environment, each airport's ability to attract its associated market demand is most often impacted by competition in the form of better levels of service and lower fares from other airports. The surveys of passengers and travel agents that were completed in conjunction with this study confirmed that air travelers routinely drive three or more hours to take advantage of commercial airline service and lower fares that are available at Phoenix, Tucson, and Las Vegas. These airports offer service and fares that, in comparison to the service and the fares that are provided at the study airports, are seen by the traveling public as being superior. Diversion of passengers from one service area to a more distant competing airport is a direct by-product of airline deregulation and the lower fares that are typically more readily available at the larger hub airports; and factors leading to passenger diversion are not likely to change.

Arizona experiences some passenger leakage to airports outside of Arizona, the primary passenger leakage being to Las Vegas. Other than the Las Vegas, Arizona air travelers are also driving, to a much smaller extent, to out-of-state major/national airports including: Albuquerque, Los Angeles, San Diego, and regional/commuter airports including: St. George, Farmington, and Gallup. Arizona residents select these other airports based on their proximity. There are also some air travelers associated with out-of-state communities that drive into Arizona to begin their airline travel. Overall, however, more enplanements are leaving than entering Arizona.

The next step in this analysis will examine the total level of unconstrained air travel demand for each market. All air travelers that are associated with the market area, both residents and visitors, regardless of where the demand is now being served, must be estimated. Once this level of unconstrained air travel demand is identified for each market, judgements can then be made as to what percentage of this demand can realistically be captured by each of the study airports, recognizing that competition and passenger diversion will continue. Assumptions as to the likelihood of the three potential markets (Safford, Sedona, and Winslow) being able to capture a sufficient percentage of each of their respective levels of unconstrained demand to support scheduled commercial airline service will also be made. Unconstrained demand levels for the markets of study airports that have commercial airline service will be used to determine feasible service improvements. As these assumptions are made, information from travel agent and passenger surveys and input from the communities will be used to determine each market's ability to increase its rate of capture, relative to its estimated unconstrained demand levels.